International Civil Aviation Organization
CAR/SAM Regional Planning and Implementation Group (GREPECAS)

WORKING PAPER

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Virtual Phase (Asynchronous, 19 January to 17 February 2026)
In-Person Phase (Mexico City, Mexico, 4 to 6 March 2026)

Agenda Item 8: CAR/SAM Air Navigation Implementation

BR-UTM PROJECT: UNMANNED TRAFFIC MANAGEMENT IN BRAZIL

(Presented by Brazil)

EXECUTIVE SUMMARY

This Information Paper presents the progress of the Brazilian Unmanned Traffic Management Project (BR-UTM). It highlights the transition from a digital authorization system to an autonomous and multi-provider ecosystem. The paper emphasizes the importance of interoperability and equitable access and proposes the creation of a regional Study Group to harmonize UTM implementation across the SAM Region, leveraging Brazil's technical maturity and collaborative framework.

Strategic Objectives 2026-2050:	• Every flight is safe and secure • Aviation is environmentally sustainable • Aviation delivers seamless, accessible, and reliable mobility for all • No country left behind • The International Civil Aviation Convention and Other Treaties, Laws and Regulations Address All Challenges • The Economic Development of Air Transport Assures the Delivery of Economic Prosperity and Societal Well-Being for All
References:	• ICAO Doc 10039 (AN-Conf/13) • ICAO UTM Framework (Edition 4) • DCA 351-6 (Brazilian National UTM Concept) • ICA 100-48 (Brazilian UTM Rules)

1. Introduction

1.1 Unmanned Aircraft System Traffic Management (UTM) in Brazil began in 2016 with the launch of the SARPAS system by the Department of Airspace Control (DECEA). This platform enabled the digitalization of airspace access requests, establishing the foundation for the electronic management of unmanned aircraft operations.

1.2 In 2017, the National Civil Aviation Agency (ANAC) established the Unmanned Aircraft Registration System (SISANT), consolidating the registration of aircraft and operators under operational safety standards.

1.3 Since then, various regulations, systems, and procedures have been developed or enhanced to ensure the safe integration of drones into the airspace in response to growing demand. Given the exponential growth of operations, Brazil recognized that safe integration required more than digitized requests; it necessitated an autonomous management ecosystem.

1.4 In light of this exponential demand growth, Brazil identified that the safe integration of Unmanned Aircraft Systems (UAS) required a transition from a "digital authorization" model to an autonomous and dynamic management ecosystem.

2. The BR-UTM Project: A Collaborative Model

2.1 In 2023, under the coordination of DECEA in partnership with the Institute of Airspace Control (ICEA), the BR-UTM Project was established. The project adopted a multi-sectoral approach, integrating academia, industry and regulatory bodies within a collaborative development environment.

2.2 The project structure is based on overcoming 26 strategic challenges, segmented into three pillars:

Technology: Development of the ECO-UTM framework, a technological interface that provides data services aimed at integrating multiple service providers.

Operational: Mapping of services and requirements for UTM Volumes (UTM Zones) and protocols between manned (ATM) and unmanned (UTM) traffic management environments.

Governance: Regulatory, economic, and institutional relationship modelling to ensure the sustainability of the sector.

2.3 Development is structured into four biennial phases, with completion scheduled for 2031. The approach begins in low-density areas, focusing on agribusiness and utilizing the concept of segregated airspace within Class G airspace, gradually evolving toward complex and congested urban environments.

3. Maturity, Innovation and Interoperability

3.1 In the second half of 2025, Brazil consolidated its regulatory framework with the public consultation of the Aeronautical Command Instruction "UTM Rules" (ICA 100-48), a document that regulates the National UTM Operational Concept (DCA 351-6) published in 2022.

3.2 The Brazilian model prioritizes equitable access and free market competition. To enable the coexistence of multiple UAS Service Suppliers (USS) within the same UTM Volume, Brazil adopted the InterUSS interoperability standard (open source). This ensures that the exchange of safety data between different private systems occurs in real-time and transparently under State supervision.

4. Conclusion

4.1 The Brazilian experience demonstrates that the success of UTM lies in the harmonization of standards and robust governance. The fragmentation of technological solutions within the SAM Region would represent a risk to operational safety and a barrier to regional economic development.

4.2 The implementation of a harmonized UTM ecosystem in the SAM Region is not only a technological goal but a safety and economic necessity. Brazil, through DECEA, offers its technical maturity and results to lead this collective effort, ensuring that South America remains at the forefront of the new era of digital aviation.

5. Proposed Action

5.1 The Meeting is invited to:

a) Establish that the processes and framework developed by Brazil serve as a basis for regional standardization, reducing the learning curve for other Member States;

b) Create a UTM Study Group to coordinate UTM implementation within the SAM Region, ensuring that national architectures are interoperable from their inception; and

c) Invite Member States to participate in the upcoming phases of the BR-UTM Project, allowing for the exchange of experts and the execution of simulated cross-border tests.

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